

**Flood Control Project Maintenance
Levee Inspections**

Fall 2011 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

MA0007	Overall LMA Rating	Total LMA Miles				
Sutter Maintenance Yard Maintenance Area 0007	A	12.07				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Encroachments	0.04		0.04	0.33%	3.33	0.03
Slope Stability	0.38		0.38	3.15%		
Erosion / Bank Caving	0.04		0.04	0.33%		
<i>Supplemental</i>						
USACE Erosion Survey	0.01		0.01	0.08%		
<i>LMA Totals:</i>	0.47	0.00	0.47	3.89%	3.33	0.03

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2011 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0007

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2011 Levee Inspection Results

Sutter Maintenance Yard Maintenance Area 0007

Waterway			Bank	Unit Miles
Unit No. 01 Feather River			Right	12.07
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	4/19/2011 - 4/19/2011		10/12/2011 - 10/12/2011	
DWR Inspector	Clay Thomas		Clay Thomas	
Accompanied By	Jason Cooper		Jason Cooper	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821-9000

X

Signature of LMA Representative

Date

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sutter Maintenance Yard Maintenance Area 0007

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Feather River						Right	12.07	10/12/2011 10/12/2011	Clay Thomas	
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	0.01	1.73	Earthen Levee	Encroachments	LS	PO	Agricultural Ditch	39.311297 ° -121.637490 °	39.334365 ° -121.633975 °	42 Y
2	1.21	1.21	Earthen Levee	Encroachments	WS	CO	Buildings	39.327187 ° -121.632395 °	39.327187 ° -121.632395 °	33 Y
3	1.51	1.51	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: The toe of the levee has been excavated by the land owner. Small holes throughout the site have been filled with a plaster like substance. Large canal on landside slope and over the levee toe. [2011 Site ID: FHR_47-5_R]	39.332000 ° -121.633178 °	39.334240 ° -121.633908 °	2 Y
4	2.83	2.83	Earthen Levee	Slope Stability	LS	M	Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.349280 ° -121.630388 °	39.349280 ° -121.630388 °	1
5	2.88	2.88	Earthen Levee	Encroachments	LS	M	Pipe Inspector Comments: 24 inch pipe L/S toe parallel with levee.	39.349857 ° -121.630632 °	39.349857 ° -121.630632 °	390 Y
6	2.88	2.88	Earthen Levee	Erosion / Bank Caving	WS	M	Schedule repair of erosion site prior to the next inspection.	39.349859 ° -121.630633 °	39.349859 ° -121.630633 °	391
7	3.85	5.37	Earthen Levee	Encroachments	LS	PO	Agricultural Ditch	39.359942 ° -121.640780 °	39.379262 ° -121.650698 °	39 Y
8	4.29	4.29	Earthen Levee	Encroachments	LS	PO	Crops	39.364815 ° -121.646005 °	39.364815 ° -121.646005 °	389
9	5.37	5.37	Earthen Levee	Encroachments	LS	PO	Landscaping	39.379487 ° -121.650604 °	39.379487 ° -121.650604 °	10
10	5.41	5.41	Earthen Levee	Encroachments	LS	PO	Tank	39.380153 ° -121.650447 °	39.380153 ° -121.650447 °	9
11	5.42	5.42	Earthen Levee	Encroachments	LS	CO	Buildings	39.379947 ° -121.650525 °	39.379947 ° -121.650525 °	32 Y
12	6.10	6.10	Earthen Levee	Slope Stability	LS	C	Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.380605 ° -121.638017 °	39.380605 ° -121.638017 °	6
13	6.61	6.61	Earthen Levee	Erosion / Bank Caving	LS	M	Note and monitor erosion site.	39.386469 ° -121.632648 °	39.386469 ° -121.632648 °	8
14	6.62	6.62	Earthen Levee	Erosion / Bank Caving	LS	M	Note and monitor erosion site.	39.386378 ° -121.632572 °	39.386378 ° -121.632572 °	18
15	8.00	8.00	Earthen Levee	Erosion / Bank Caving	LS	M	Schedule repair of erosion site prior to the next inspection.	39.401147 ° -121.630885 °	39.401147 ° -121.630885 °	3 Y
16	8.88	8.88	Earthen Levee	Encroachments	LS	M	Prunings	39.408897 ° -121.637392 °	39.408897 ° -121.637392 °	388
17	9.05	9.41	Earthen Levee	Slope Stability	LS	M	Repair slope instability.	39.409363 ° -121.634667 °	39.412797 ° -121.632463 °	7

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor
N : Not Inspected, see Inspector Comment
C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sutter Maintenance Yard Maintenance Area 0007

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 01 Feather River						Right	12.07	10/12/2011 10/12/2011	Clay Thomas	
LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
18	9.28	9.28	Earthen Levee	Encroachments	LS	M	Prunings	39.412664 ° -121.634709 °	39.412664 ° -121.634709 °	5
19	9.79	9.79	Earthen Levee	Encroachments	LS	CO	Buildings	39.416384 ° -121.634503 °	39.416384 ° -121.634503 °	45 Y
20	9.97	9.97	Earthen Levee	Encroachments	LS	M	Prunings	39.418817 ° -121.634895 °	39.418817 ° -121.634895 °	387
21	10.96	10.96	Earthen Levee	Slope Stability	LS	M	Repair slope instability. Inspector Comments: 326 not repaired	39.428521 ° -121.642482 °	39.428521 ° -121.642482 °	386
22	11.51	11.51	Interior Drainage & Piping Systems	Culverts: Inlets / Outlets	CR	C	Inspector Comments: 350 This site has been repaired, the O&M office is working on a report for NOV's that have been repaired on their levees.	39.435374 ° -121.645664 °	39.435374 ° -121.645664 °	385
23	11.63	11.69	Earthen Levee	Encroachments	LS	PO	Landscaping	39.437119 ° -121.645860 °	39.437949 ° -121.646280 °	43 Y

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable PO : Partially Obstructing N : Not Inspected, see Inspector Comment C : Corrected
M : Minimally Acceptable CO : Completely Obstructing
U : Unacceptable W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	12.07	10/12/2011 10/12/2011	Clay Thomas

Levee Mile Report Line	1
Start Levee Mile	0.01
End Levee Mile	1.73
Location	Land Side
Category	Earthen Levee
Item	Encroachments

AG ditch landside slope and toe.

cathom_f_20111010_804.jpg



Levee Mile Report Line	2
Start Levee Mile	1.21
End Levee Mile	1.21
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Levee mile 1.21. This is a photo of the building on the waterside slope.

cathom_f_20111010_801.jpg



Levee Mile Report Line	3
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011_FHR_47-5_R_1.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	12.07	10/12/2011 10/12/2011	Clay Thomas

Levee Mile Report Line	3
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #2

USACE2011_FHR_47-5_R_2.jpg



Levee Mile Report Line	5
Start Levee Mile	2.88
End Levee Mile	2.88
Location	Land Side
Category	Earthen Levee
Item	Encroachments

This photo shows a pipe approximately 24 inch in diameter at the landside toe of the levee, the pipe runs parallel with the levee, they are repairing the existing pipe.

cathom_f_20111021_966.jpg



Levee Mile Report Line	5
Start Levee Mile	2.88
End Levee Mile	2.88
Location	Land Side
Category	Earthen Levee
Item	Encroachments

This is looking from the crown of the levee at the pipe repair site.

cathom_f_20111021_967.jpg

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment
C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	12.07	10/12/2011 10/12/2011	Clay Thomas

Levee Mile Report Line	7
Start Levee Mile	3.85
End Levee Mile	5.37
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Levee mile 5.37. This is a photo of the AG ditch on the landside slope and toe.

cathom_f_20111010_802.jpg



Levee Mile Report Line	7
Start Levee Mile	3.85
End Levee Mile	5.37
Location	Land Side
Category	Earthen Levee
Item	Encroachments

AG ditch landside slope and toe.

cathom_f_20111010_803.jpg



Levee Mile Report Line	11
Start Levee Mile	5.42
End Levee Mile	5.42
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Levee mile 5.42. This photo shows a building on the landside crown, shoulder and slope.

cathom_f_20111010_800.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	12.07	10/12/2011 10/12/2011	Clay Thomas

Levee Mile Report Line	15
Start Levee Mile	8.00
End Levee Mile	8.00
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Levee mile 8.00. This photo shows the erosion on the landside slope.

cathom_f_20111010_799.jpg



Levee Mile Report Line	19
Start Levee Mile	9.79
End Levee Mile	9.79
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Levee mile 9.79. This photo shows a building at the landside toe.

cathom_f_20111010_806.jpg



Levee Mile Report Line	23
Start Levee Mile	11.63
End Levee Mile	11.69
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Landside landscaping levee mile 11.63.

cathom_f_20111010_805.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected